

## Section VI

### Evaluation Section - 1 January 1958 to 31 December 1958

#### 1. Evaluation and Analysis of the following test missions:

- a. 73 - "B" Missions
- b. 11 - "C" Missions
- c. 2 - A-2 Missions
- d. 1 - A-1 Mission

Approximately 650,000 feet of film was viewed in making the evaluations on the above missions.

#### 2. Evaluation of about 25 missions at Project Hqs. and E. K. which included the viewing of an additional 60,000 to 75,000 feet of material.

2.1 The majority of these were "B" missions which, in most cases, showed a marked increase in quality over that which had been obtained in previous seasons. Several of these were of even better quality than that obtained in local test missions under more or less ideal operation conditions. Some of the problem areas detected by viewing this material were a light leak and the slipping of a frame (thought to be a shutter malfunction) both of which were evidenced only in the on-off operation during operational missions and not in test missions where the unit was run continuously. Both of these conditions have since been corrected. Another area of concern, a loss of quality during the initial portion of these missions, is being investigated. It is suspected the cause may be due to the rapid temperature change in the equipment bay causing increased distortion in the lens system. Verification of this hypothesis and consequent remedial actions are being sought through a series of test flights to be flown early in 1959 so that maximum quality may be obtained through all of each mission in the 1959 season.

The quality of the A-2 take viewed remained up to the same high standard established during the previous seasons.

#### 3. An S-Curve analysis was established to record progress made during product improvement program on the "B". Also, this was used to establish minimum acceptability standards of quality prior to shipment of each unit.

3.1 The product improvement program entered into at the beginning of the year resulted in the average quality on the "B" being increased from approximately 25 l/mm to 35-40 l/mm or an increase of about 10-15 l/mm. This increase is being noted throughout as the minimum quality obtained was raised from 10 to 25 l/mm and the maximum changed from 35 to 40 up to 45 to 50/. Therefore, a mean of 35 l/mm was established as minimum quality on all units before acceptance for shipment.

## Section V

### Spares and Supply

Delivery of all items was completed on Contracts SC-21-54 (Work Order 32) and BC-200 (Work Orders 44 and 322) during the 1958 season. Call Contract HF-CT-696 (Work Order 325) was started 1 July 1958, with a total of four Calls to each Customer submitted through 31 December 1958. This contract is 98% on schedule.

Regarding Contract BC-450, items returned by Depots to M & O for rework, the 1958 season started with a relatively large backlog. However, in September 1958, a complete review of the backlog was made and a semi-monthly list of all items on work order for each customer was initiated and distributed to M & O and the Depots. This action rectified many discrepancies and established a record control system which should enable faster turnaround time for items requiring rework. In August 1958, a complete inventory of M & O stores was conducted. The inventory was split into sections for Customers A and B. Maximum and minimum supply levels were established on all items.

A close liaison was maintained with both Depots and Del Rio through periodic visits. The contacts have eliminated many discrepancies before they developed into major problems. Hycon Spares Coordinator, Mr. R. Keppler, at the request of the PE Corp. and FOG, made several trips to Norwalk to assist in establishing a supply system at that location.

In-plant, Stock Record Cards have been made covering all tooling on Contracts SC-21-54 and BC-200 to facilitate transfer to M & O. A review and disposition report of all GFE for both contracts was made to insure proper control. A procedure was established for obtaining disposition of all scrap and obsolete materials on hand.

4. Tests were outlined for verification of suspected causes of degradation in quality, such as vibration, aircraft motion, temperature changes, starlight and filter characteristics.

4.1 All areas of possible improvement to the quality of the "B" take are being investigated such as the exclusion of much "stray light" through a series of baffles. Baffle tests to date indicate an improvement in the quality, mainly by increasing the contrast and by permitting easier recognition of detail. Filter tests are being planned with additional optical glass filters to determine if ground haze can be more satisfactorily penetrated than with just the present coatings. Tests to date in this area have been unsatisfactory owing to the effects of temperature, humidity and air movement on the gelatin type filters used on the tests, these being the only ones then available.

5. A special "B" Fault Book was assembled and distributed to all parties concerned.

## Section VII

### Future Activities

Future activities during the 1959 season will include continuation of the following:

- a. Vibration Studies
- b. Inflight Quality Change
- c. Stray Light Control and Haze Penetration
- d. S-Curve Standardization
- e. Temperature Studies

To:

Date: 10 February 1959

STAT

From:

STAT

Subject: Annual Report of Project Activities for Period 1 January 1958  
through 31 December 1958

List of Enclosures:

1. Report of Equipment Effectivity
2. Service Bulletin Summary
3. Configuration Status
4. Manning Charts
5. Mission Summary 1958

Outline of Contents:

- Section 1 - Maintenance and Overhaul
- Section 2 - Equipment Effectivity
- Section 3 - Field Service Department
- Section 4 - Test Site Activities
- Section 5 - Spares and Supply
- Section 6 - Evaluation Section
- Section 7 - Future Activities

## Section I

### Maintenance and Overhaul

#### Engineering Department

The main concern and effort has been directed to produce improvement of the 73-B Configurations. The end result of this effort has been marked improvement in both equipment reliability and product quality. Following are the major areas of endeavor:

1. Two-Speed Film Drive Motor (73-B). Provides reliable two-speed motors to replace one-speed units which necessitated manual changeover. This new unit provides in-flight selection of coverage pattern.
2. Film Drive Assembly. Redesigned shuffle cam providing smoother IMC and relocated guide roller for more accurate film sensing.
3. Light Baffles (73-B). Eliminates extraneous internal light reflections which insures low level of base-fog on results.
4. Take-Up and Film Drive Clutches (73-B). Provides smoother operation of take-up and film drive. Also reduces field maintenance to a minimum on these components.
5. Programmer-Junction Box (73-B). Completely redesigned for in-flight mode selection. Programmer and junction box are enclosed within one box to simplify wiring and maintenance.
6. Shock Mounting (73-B). IMC Follower Cam Optical Structure, Take-up assy., oblique drive assy, and shutter were shock mounted to reduce vibration and consequent degradation of the photo results.
7. Shutter HS-732. Increased reliability through refinement of detail design in the mechanical and electrical system.
8. Remote Control of Configuration. Enables pilot to select different modes of operation during flight.
9. Supply Spool Brake. Provides smoother supply film feed which affects and improves film transport.
10. Tension Sensing Assy. Increased reliability through refinement of detail design in the mechanical and electrical system.

11. Platen. Improved and more positive vacuum application to platens.

12. Vacuum Valve. Improved design utilizing rubber piston which replaces previous metal piston. This eliminated need for critical adjustment and eliminates previous trouble area.

13. Data Recorder. Improved installation, dependability and quality of image.

The activities report of the Maintenance and Overhaul section for the calendar year 1958 emphasizes the work completed for product improvement and/or quality improvement. This section contains the following major breakdown of activity: Shop Work Orders, Service Bulletins, Maintenance Order, Authorization Requests, S-Curves, Fault Book and U. R. 's (Unsatisfactory Reports).

A. Work Shop Orders: The following number of major components and units were overhauled and returned to service:

1. 18 Configurations 73-B
2. 4 Configurations A-2
3. 3 Configurations A-1
4. 101 Shutters HS-732
5. 135 Shutters HS-731
6. 31 Shutters HS-730
7. 51 Magazines HM-732
8. 13 Magazines HM-730
9. 28 Film Drive Assy. 73-B

B. Service Bulletins. Equipment improvements generated and initiated by in-plant engineering are furnished directly to the field for immediate use on equipment by means of the service bulletin system. A total of 31 service bulletins were initiated and delivered during this period. The complete list is submitted as enclosure (2).

C. Maintenance Orders (MOE's). The MOE system furnishes the detachment teams with the latest preventative maintenance procedure and provides an interim introduction to new equipment and/or techniques. A total of three MOE's were initiated and delivered during this period.

1. Moe #17 - Preliminary Manual, Shutter HS-732 (Revision 1)
2. Moe #18 - 73-B Configuration (Revisions 1 & 2)
3. Moe #19 - Shutter Speed Testing and Reporting.

D. Authorization Requests (A. R. 's). A total of 239 A. R. 's were processed during this period. The following breakdown indicates the general distribution of activity.

- 15 A-1 Configuration
- 39 A-2 Configuration
- 152 73-B Configuration
- 33 Ground Support Equipment

E. S-Curves. A system for standardizing and controlling the quality of each configuration was introduced into operation during this period. This system enables each detachment to check the quality output of each configuration prior to the next mission. This information is fed back to the plant and consolidated for continual monitoring of equipment performance.

F. Fault Books. Six fault books were fabricated to assist in detecting areas of trouble within the "B" Configuration. These were delivered to Det. "B", Det. "C", Hqs. P.I., EAFB, FOG and Plant. Graphic illustrations and explanations were furnished on the following subjects:

1. Image Motion
2. Shutter
3. Focus
4. Vacuum Loss
5. Mistracking
6. Fogging
7. Static
8. Obstructions
9. Condensation
10. Overlay Tool for P. I. Use

G. Unsatisfactory Reports. A total of 20 U. R. 's were received from FOG and acted upon during this period. The majority of these U. R. 's were concerned with relatively minor discrepancies.



## Section II

### Equipment Effectivity

Enclosure (1) summarizes equipment effectivity for the 1958 operational season based on Headquarters Directed and Test Missions of Detachments B and C. The box scores for Headquarters Directed Missions utilizing Configurations A-1, A-2 and B are as follows: B Detachment, 95.1% and C Detachment, 92.9%, or an overall equipment effectivity of 94.0%.

## Section III

Field Service Department

During the later part of 1958, [ ] was assigned to the position of Field Service Manager replacing [ ] On 1 December 1958, new Agreements of Employment were signed by thirteen (13) Field Service Personnel at Detachments B and C. To bring the number of personnel up to a complement of eight (8) men at each Detachment for the 1959 season, additional new personnel will sign contracts in January and February. Personnel who did not renew their contracts were either reassigned to in-plant activities or terminated. Annual vacations for overseas personnel commenced in November and for the most part will have been completed by February 1959. Rotation of personnel between detachments was minimized with the transfer of only one man from Detachment B to Detachment C. A back up support level of from three (3) to five (5) men is planned to be available and on contract for deployment when and where required. Enclosure (1) outlines the current manning charts covering Detachments B and C. Support of Test Site activities during 1958 was accomplished by a permanent Field Service crew supplemented by back up personnel awaiting overseas deployment. Effective 1 January 1959, however, Test Site activities will be supported by personnel assigned to the M & O Section and will be dispatched to the Site only for Headquarters authorized tests.

A team of three (3) Field Service Representatives was maintained at Del Rio to support FOG operations. [ ] was assigned in June 1958, to assist Messrs. [ ]. In August, [ ] was reassigned as Senior Engineer at Detachment B and was replaced by [ ]. For personal reasons, [ ] returned to take another company assignment at the end of the year and was, therefore, replaced by [ ]. It is anticipated that the services of Messrs. [ ] and [ ] will continue through the year 1959.

## Section IV

Test Site Activities

During the 1958 season, a total of 146 missions were flown at the Test Site with A-1, A-2, B and C Configurations plus Triple Tracker. 75 of these flights were optical and reliability acceptance tests with the 73-B Configuration, 18 for Project and 57 for FOG. One optical and reliability test flight was made with an A-1 Configuration and two flights with A-2 Configurations for the Project. Eleven (11) test flights were flown with the C Configuration. Film from one side of all missions and all film from some missions was processed at the test site. A total of 330,000 feet of 9-1/2 inch film and 20,000 feet of 6-3/4 inch film was processed on the A-9 Film Processor.

Fifty-one Red Dot missions were flown for E. K. using the A-2 and B Configurations and the Tracking Cameras, for the purpose of testing photographic emulsions to determine which film-filter-camera setting-processing combination would provide the best photographic results. The following tests were accomplished:

- 11 Series D Triple Tracker Missions
- 11 Series E A-2 Missions (3-V Mount)
- 6 Series F A-2 Missions (3-V Mount)
- 4 Series G A-2 Missions (3-V Mount)
- 4 Series H A-2 Missions (3-V Mount)
- 8 Series J Triple Tracker Missions
- 7 Series K B Configuration

With the exception of film clips, all Red Dot material was shipped to E. K. for processing.

Headquarters Directed Missions for 1958 included one flight with B Configuration Serial #13, and one flight with A-2 Configuration, Serial #8. All material from these two missions was forwarded to E. K. for processing.

To provide E. K. with rolls of 70mm film for processing, four special missions were flown using four Trackers mounted in a single hatch.

Installation, maintenance and repair of Tracking Cameras, Hand Controls, Drift Sights and Sextants were also supported by Hycon Field Service personnel at the Test Site.

ENCLOSURE

1

**REPORT OF EQUIPMENT OPERATION EFFECTIVITY**

"Effectivity" is interpreted to mean the overall effectiveness or ability of a Detachment in obtaining the end result of useable exposed film for all types of Missions (Training-Test, Hq. Directed, vx) with any specified photographic configuration. Equipment effectivity is based primarily on the electro-mechanical performance of the configurations to function properly and reliably. Operation of the shutter, film transport system, oblique positioning, DMC, programming, vacuum are considered for determining acceptable performance. Equipment effectivity is also influenced by the ability of the photo support team to properly maintain, install, and checkout the configuration systems.

The quality (resolution, contrast, exposure, etc.) of the resultant photography is not considered as a factor in determining equipment effectivity due to the numerous variables involved which are not directly related to equipment performance. In summation therefore, equipment effectivity is based percentage wise on the amount of useable film footage obtained from a mission as opposed to the amount scheduled.

**INDIVIDUAL DETACHMENT OPERATION AND EFFECTIVITY****DETACHMENT B**

	<u>Hqs. Directed</u>		<u>Training &amp; Test</u>	
	<u>No.</u>	<u>Eff.</u>	<u>No.</u>	<u>Eff.</u>
A-1	1	100%	2	92%
A-2	25	92.5%	11	100%
B	28	93.0%	30	81.8%
<b>Total</b>	<b>54</b>	<b>95.1%</b>	<b>43</b>	<b>91.3%</b>

**DETACHMENT C**

	<u>Hqs. Directed</u>		<u>Training &amp; Test</u>	
	<u>No.</u>	<u>Eff.</u>	<u>No.</u>	<u>Eff.</u>
A-1	5	94.8%	0	
A-2	13	99.7%	2	83.0%
B	20	84.1%	10	100%
<b>Total</b>	<b>38</b>	<b>92.9%</b>	<b>12</b>	<b>91.5%</b>

1958 OPERATION AND EFFECTIVITY**Higher Headquarters Directed Missions**

	<u>Det. B</u>	<u>Det. C</u>	<u>Total</u>
Configuration A-1	1	5	6
Configuration A-2	25	13	38
Configuration B	28	20	48
	<hr/>	<hr/>	<hr/>
Total	54	38	92

Overall Equipment Effectivity

(94.0%)

TRAINING AND TEST MISSIONS

	<u>Det. B</u>	<u>Det. C</u>	<u>Total</u>
Configuration A-1	2	0	2
Configuration A-2	11	2	13
Configuration B	31	11	42
	<hr/>	<hr/>	<hr/>
Total	44	13	57

Overall Equipment Effectivity

(91.4%)

**A-2 MALFUNCTIONS (1 January 1958 to 31 December 1958)**

<b>SHUTTER</b>		<b>CASE DRIVE</b>		<b>MAG.</b>	
<u>Trip Spring</u>	<u>\$</u>	<u>Loose Taper Pin</u>	<u>\$</u>	<u>Misttracking</u>	<u>\$</u>
1. 7-25 B1A39 B6 HB#0554 4-57	80	1. 7-30 B1A45 V7	98	1. 8-6 B1A50 18 HM #23	49
2. 8-15 B1A57 V7 HB#2075	89	2. 9-12 B1A73 18	95		
3. 8-19 B1A60 V7 HB#2708	91				
<u>Blade Link</u>		<u>Gear Bind</u>		<u>Material Stuck to Metering Roller</u>	
1. 6-23 B1A18 B6 BN 54 2581 5-57	83	1. 8-6 B1A50 V7 HB#8 (\$ figured with 18)		1. B/7 B1A51 18 HM#	95
2. 7-16 B1A27 V7 HB#54 2091 6-57	77	2. 8-2 B1A54 B6 HB#99	93		
3. 7-25 B1A38 V7 HB#4646 3-57	73				
4. 7-28 B1A42 18 HB#2124 3-57	97				
5. 4-23 C1737 V7 HB#2422 6-57	96				
6. 6-21 B1A17 B6 HB#3345 4-57	94				
7. 11-25 OT-58-41 B-6 HB#2076	66				
				<u>No Malfunctions</u>	
				1. DMC	
				2. Programmer	

**B MALFUNCTIONS (1 January 1958 to 31 December 1958)****EE-732 SHUTTER**

<u>Misfiring</u>	<u>%</u>
1. 3-26 BT 58-43 SN 61	97
2. 5-2 BT 58-63 SN 96	25
3. 5-10 C-1749 SN 17 (Undowled)	85
4. 5-12 C-1751 SN 17 (Undowled)	70
5. 5-16 C-1754 SN 58 (Undowled)	65
6. 5-23 C-1761A SN 63 (Undowled)	97
7. 3-24 C-1762 SN 63 (Undowled)	(Other failure)
8. 8-29 SN-58-20	90

Auto Wind

1. 4-18 BT 58-57 SN 61	47
2. 8-9 BT 58-87 SN 16	73

Counter Blade

1. 10-31 BT-58-90 SN	2
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K-2 Relay

1. 3-18 BT 58-38 SN 61	81
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Blade Jam

1. 4-30 BT 58-61 SN 12	11
2. 8-19 B-1461 SN 16	19

**FIIM TRANSPORT**

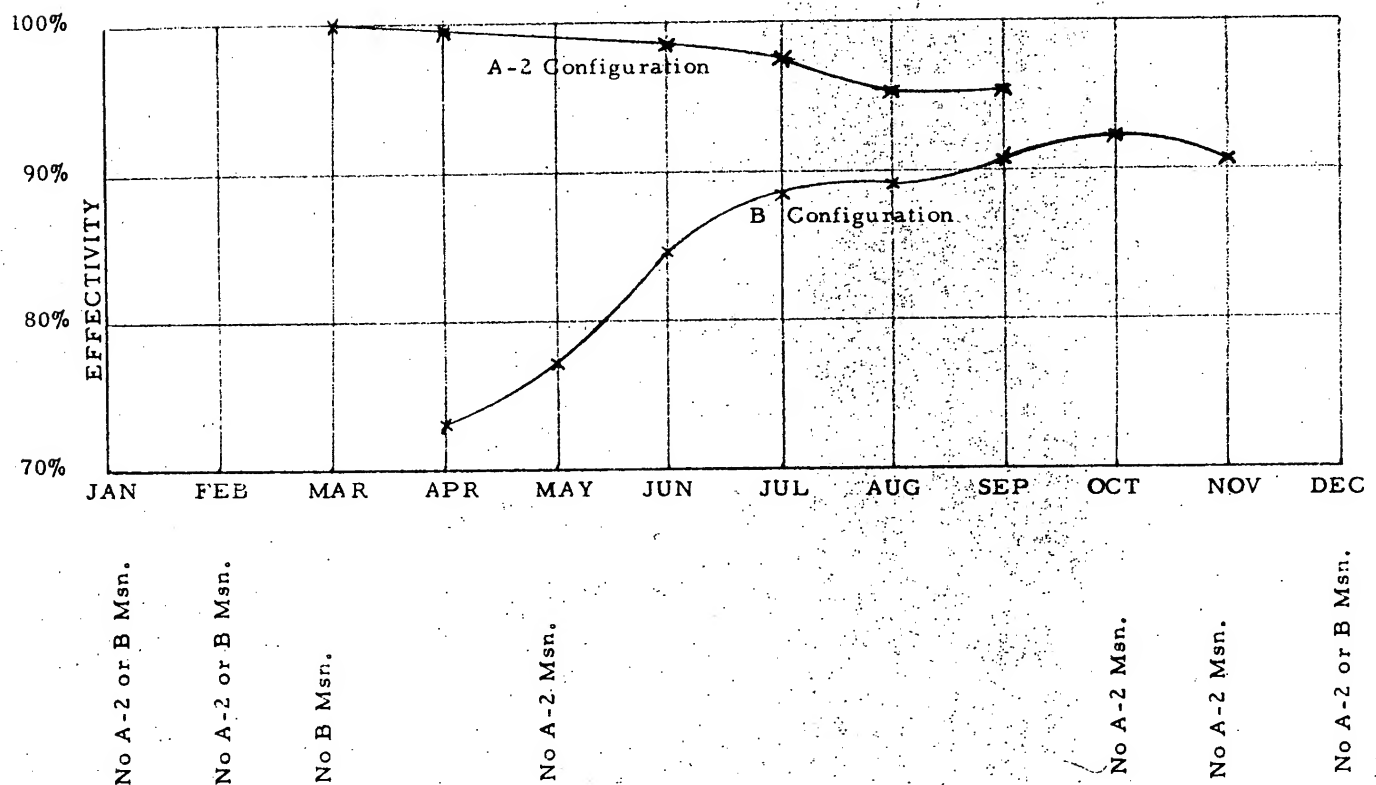
<u>Tension Sensor</u>	<u>%</u>
1. 3-18 B-1409 B-SN 6	50
2. 5-26 C-1763 B-SN 8	50
3. 11-6 BT-58-91 B-SN 2	50
<u>Spool Gear</u>	
1. 5-27 BT-58-74 SN 57H-377	62
<u>Spool Bearing Misaligned</u>	
1. 11-19 B-1493 SN 76-8-9-68	43
<u>Film Jam (No supply brake)</u>	
1. 7-23 B-1436 B-SN 6	92
<u>Film Jam (No apparent cause)</u>	
1. 4-21 C-1734 B-SN 10	10
<u>Film Jam (Condensation)</u>	
1. 4-5 C-1722 B-SN 10	55
<u>Defective Material</u>	
1. 7-10 BT 58-83 B-SN 9	17
<u>Vacuum Solenoid Stuck</u>	
1. 5-24 C-1762 B-SN 10	0

NO MALFUNCTIONS

1. Programmer
2. Oblique Drive



EQUIPMENT OPERATION & EFFECTIVITY FOR 1958  
HEADQUARTERS DIRECTED MISSIONS



**ENCLOSURE** Enclosure (2)SUMMARY OF SIGNIFICANT SERVICE BULLETINS  
FOR 1958I. "B" Configuration

	<u>Title</u>	<u>Purpose</u>
HC-73B-SB6	73B Brake Solenoid Mod.	To replace 2-wire solenoids with 3-wire solenoids.
HC-73B-SB5	Oblique Position Lamp Block	To eliminate loosening of Position Indicator Lamp.
HC-73B-SB7	Oblique Position Resistor	To give better control of lamp intensity and prevent lamp burnout of bulbs by turning potentiometer to extreme position.
HC-73B-SB8	IMC Cam Follower Vibration Isolator	(Title Self-Explanatory)
HC-73B-SB9	Film Drive Pressure Roller and Servo Motor	Remove interference in film drive and protect servo motor radio noise filter from lens cone.
HC-73B-SB10	Tension Switch Actuator Mod.	To permit adjustment of tension switch actuators.
HC-73B-SB11	Drag Brake and Gear Install	To assure sufficient tension on film off supply spool from full spool to empty spool condition.
HC-73B-SB12	Installation 2-Speed Film Drive Motor	To provide reliable dual speed motors to replace original 1-speed motor and first design of 2-speed motors.
HC-73B-SB13	Camera Structure Light Baffles	To eliminate extraneous light from outside of format area reflecting from inside of camera structure to picture area.
HC-73B-SB14	Takeup and Film Drive Mod. (Clutch)	To eliminate excessive field maintenance previously required on film drive and takeup drive clutches; to provide smoother slippage and reduce possibility of binding under extreme emergency conditions of operation.
HC-73B-SB15	Standby Holding Circuit Mod.	To eliminate extra data chamber counter pulse when camera is shut off and restarted during mission.

	<u>Title</u>	<u>Purpose</u>
HC-73B-SB16	Clip Assy, Sensor Roller	To eliminate misadjustment of tension sensing device during shipping and ground handling of camera.
HC-73B-SB17	Nut Spring Pivot on Film Drive	To replace Hex. Nut with Slotted Nut to eliminate film interference.
HC-73B-SB18	Shutter Shock Mount Installation	To establish proper dimensions between shock mounts for shutter.
HC-73B-SB19	Field Replacement of Platen	To improve operation of camera by installation of improved platen assy.
HC-73B-SB20	Replacement of Ground Designator Letters "L" & "R"	To provide a good exposure of the letters "L" and "R" on the film.
HC-73B-SB21	Replace Rt. Tension Sensor Arm	To replace 2-piece assembly with improved 1-piece arm.
HP-8191-SB1	Mod. Mark I, II, & III Controls	To allow pilot selection of all four modes of 73-B Camera operation.
HP-8191-SB2	Replacement of 2-amp fuses with Circuit Breakers	(Title Self-Explanatory)
HS-732-SB2	Capacitor & Diode Change, K-2 Relay	1.0 mfd capacitor in place of .1 mfd. capacitor reduces arcing; also removal of selenium diode.
HS-732-SB3	K-2 Relay Arc Suppression and Testing	To provide voltage protection for arc suppression capacitor across relay contacts and provide field personnel with oscilloscope check to determine serviceability of filter-suppressor components.

## II. A-1 and A-2 Configurations

HM-732-SB1	Platen Measurement HM-732 Magazine	To supply depth gauge for periodic inspection of platen surface to camera mating surface for assurance of proper focus.
HP-7313-SB8	a) HR-731 Manual Trip Lockout b) Mode 2 Lock-up Protection	a) To prevent camera HR-731 from tripping when HC-730 camera trip is depressed. b) To prevent relay lock-up when switching from Mode 1 to Mode 2.

III. Ground Support and Related Equipment

	<u>Title</u>	<u>Purpose</u>
HG-SB8	Modification of Electrical Test Set	To bring Electrical Test Set up to date to test latest modification of 73B Camera with 4-mode selection.
HG-SB10	Elec. Test Set Cables	To add 3 new cables to test set cable list.
HG-SB10A	Elec. Test Set Cables	To furnish Programmer test cables for Elec. Test Set.
HG-SB11	Power and Vacuum Cart Mod.	To remove wet cell acid batteries and replace with 115 V A. C. 50-60 cycle to 28 VDC Rectifier Power Pack.
HG-SB12	Sensitometer	To add primary transformer to Sensitometer in order to reduce fluctuation due to line voltage variations.
HG-SB13	Cart Parking Brake	To provide a safe parking method.
HSOP-SB7	Filing and Disposition of Obsolete Prints	To insure that field group is keyed for latest revisions of drawings as they are released.

ENCLOSURE

3

## CONFIGURATION STATUS

12 January 1959

1. A-1 Configurations

<u>Tri-Mount</u>	<u>Roaker</u>	<u>Location</u>	<u>Customer</u>	<u>Remarks</u>
1	6		B	Complete with HR-731 <sup>STAT</sup>
2	2		A	
3	3		B	No cameras (disassembled)
4	4		A	W/O HR-731
5	9		B	No cameras (disassembled)
6	1		B	Complete with HR-731
7	7		B	Complete with HR-731
8	8		A	W/O HR-731, W/3 HC-730 & HM-730 (HC S/N 18, 19, 25)
9	5		A	W/O HR-731

Note:

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When configurations S/N 3 & 5 were returned to M & O in 1958, four (4) HC-730 cameras were removed, S/N 14 & 19 from #3 and S/N 18 & 25 from #5. A-1 Configuration S/N 8 was received at M & O with three HC-730 cameras S/N 10, 12 & 24. All these cameras (and accompanying HM-730 magazines) have been overhauled and submitted to Bureau of Standards for certification as to distortion, determination of principal-point, alignment of fiducials, calibration of shrinkage markers, and flatness of platen. Configuration S/N 8 was returned to Customer A with cameras S/N 18, 19 & 25. S/N 12 has been assigned as a spare camera for configuration S/N 8 and is being held in M & O new stores on Voucher #58-5114 per request of Spares Coordinator. Camera S/N 14 and 24 are being held in M & O new stores on Voucher #9015215 as spares for Customer B awaiting disposition by Spares Coordinator. S/N 10 is on loan to Customer A project headquarters.

12 January 1959

2. A-2 Configurations

<u>Serial No.</u>	<u>Location</u>	<u>Customer</u>	<u>Remarks</u>
1		A	
2		A	
3		A	
4		A	
5		A	
6		A	
7		A	
* 8		A	Held in Ready Storage
9		A	
10		B	
11		B	
12		B	
13		B	
14		B	

STAT

## \* Note:

It is of advantage to M & O and the customer to keep this configuration available to M & O for working out and testing minor component improvements, such as data unit installation. This in no way affects the readiness capability for immediate shipment on short notice and in addition, provides a complete configuration for rotation to detachments to permit incorporation of desirable improvements in field units, besides providing the opportunity for complete factory M & O.

12 January 1959

3. B Configurations

<u>Serial No.</u>	<u>Location</u>	<u>Customer</u>	<u>Remarks</u>
1		B	STAT
2		A	
3		B	
4		A	
5		A	
6		A	
7		B	
8		A	
9		A	
10		A	
11		B	For
12		B	
13		B	
14		B	For
15		B	
16		B	
17		B	For

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4. C Configurations

<u>Camera No.</u>	<u>Location</u>	<u>Customer</u>
1	Plant	B
2	EAFB	B
3	Plant	B
4	EAFB	B
5	PE	B
6	Plant	B



12 January 1959

5. Summary

<u>Physical Location</u>	<u>Config. A-1</u>		<u>Config. A-2</u>		<u>Config. B</u>		<u>Config. C</u>	
	<u>Cust. A</u>	<u>Cust. B</u>	<u>Cust. A</u>	<u>Cust. B</u>	<u>Cust. A</u>	<u>Cust. B</u>	<u>Cust. A</u>	<u>Cust. B</u>
M & O	0	1	1	0	0	2	0	3
EAFB	0	0	0	0	0	1	0	2
PECO	0	0	0	0	0	0	0	1
	—	—	—	—	—	—	—	—
Subtotal	0	1	1	0	0	3	0	6
Depot A	1		0					
Det. B	1		3		3			
Det. C	1		3		3			
	—		—		—			
Subtotal	3		6		6			
Depot B		2		0		4		
Del Rio		2		4		3		
		—		—		—		
Subtotal		4		4		7		
TOTAL	3	5	7	4	6	10		6
Salvage		1		3		1		0
Total Serial Nos.		9		14		17		6

12 January 1959

6. Status Summary

A-1 Configuration at M & O

A-1 #1 Projected delivery 15 March 1959.

a. This configuration shipped from [ ] for M&O. It is  
to be returned to [ ] on completion of overhaul  
and flight test.

STAT

STAT

b. Is presently in M&O.

c. HC-730 cameras and magazines are being readied for  
shipment Bu. Stds. for calibration.

A-2 Configuration at M & O

A-2 #8 This configuration is being held in M&O for storage only, and  
is ready for delivery upon direction.

12 January 1959

6. Status Summary

B Configurations at M & O and EAFB

B #11 Projected delivery undetermined, pending lens delivery.

a. This configuration shipped from [ ] for M & O. It is to be returned to [ ] via WRAMA on completion of overhaul and flight test.

STAT

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b. Is presently in M & O having completed a series of Red Dot Tests with special non-coated lens.

c. B Lens sent to PE for overhaul. Not yet received for installation in this camera.

d. Will be used for vibration studies pending lens arrival.

B #14 Projected delivery 23 January 1959.

a. This configuration shipped from [ ] It is to be returned to [ ] on completion of overhaul and flight test.

STAT

b. Is presently at EAFB and is scheduled for flight testing on 14 January 1959.

6. Status Summary, Cont'd.

B #17 Projected delivery undetermined, pending lens delivery.

a. This configuration shipped from  for M&O. It is to be returned to  on completion of overhaul and flight test. STAT STAT

b. Is presently in factory M&O and has had no flight tests since it was received from  STAT

c. B Lens sent to PE for overhaul.

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Next 2 Page(s) In Document Denied

Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Configuration Operation	Tracker Operation	Drift Sight Operation
3-5-58		BT-58-29	352		210 (MK2)		450'		Successful. Quality good.	Clear.
3-6-58		BT-58-30	353		7 (MK2)		475'		Successful. Quality good.	Clear.
3-7-58		BT-58-31	352	B #2	12	3 hr., 43 min.	500'	Successful. Quality undetermined due weather.	Successful.	Clear.
3-11-58		BT-58-33	352	A-2 #4	13		250'	Not turned on due weather.	Metering cycle switch. Malfunction after 250'.	Clear.
3-12-58		BT-58-34	351	B #9	17	3 hr., 24 min. 1800'	240'	Successful. Quality fair.	Malfunction after 240' - cause undetermined.	Fogged for 1 hour, then cleared.
3-13-58		BT-58-35	352	A-2 #4	13	120'	450'	Successful. Quality fair. Weather poor.	Successful.	Clear.
3-15-58		BT-58-37	352	B #2	12	3600'	126'	Successful. Quality fair. Weather poor.	Malfunction after 126'. Cause undetermined.	Clear.
3-15-58		4078	351		13		600'		Successful. Quality excellent.	Clear.
3-18-58		BT-58-38	352	B #9	7	1914 cyc	250'	HS-732 Manfunction #61. K-2 Relay - transport okay. Undercast - no quality. 81%	Malfunction after 250' - cycle switch.	Clear.
3-19-58		BT-58-39	351		13		11'		Malfunction after 11' - cycle switch.	Fogging throughout flight. Checked for leaks.
3-20-58		BT-58-40	352	A-2 #3	7	1800'	550'	Successful - V-7 counter failure - Quality excellent.	Successful.	Clear.
3-21-58		BR-58-41	351	B #9	7	?	450'	100% successful. Vib on obliques - no quality due poor weather.	Successful.	Clear.
3-25-58		BT-58-42	352	A-2 #5	17		11'	Not turned on due weather.	Malfunction after 11' - spool latch interference.	Fogging for first 1 1/2 hrs, then cleared. Driftsight pulled and found to be leaking at numerous places.

Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Configuration Operation	Tracker Operation	Drift Sight Operation
3-26-58		BT-58-43	355	B #9	7	2276 cyc	500'	HS-732 #61. Malfunctioned after 2276 out of sched. 2350. Faulty latching - Xport okay. Quality good. 97 %	Successful.	Clear.
3-27-58		BT-58-44	351	A-1 #5	13	R2-V3-L4 167' V5 126'	11'	100 % successful. Weather undercast.	Malfunction after 11'. Spool latch interference.	Clear.
3-28-58		BT-58-45	352	A-2 #5	12	158' per camera	475'	100 % successful. Weather undercast.	Successful.	Clear.
4-1-58		BT-58-46	352	A-1	12		425'	Cancelled due weather.	Successful.	Clear.
4-2-58		BT-58-47	351	B	17		400'	Cancelled due weather.	Successful.	Clear.
4-3-58		BT-58-48	355	A-1	17		475'	Cancelled due weather.	Successful.	Mirror fogged and face glass scratched.
4-8-58		BT-58-50	355	B #2	13	4320'	450'	Successful 100 %. Quality poor due weather.	Successful.	Fogging of D/S - (Leaks).
4-9-58		BT-58-51	351		13		450'		Successful.	Clear.
4-10-58		BT-58-52	355	B	7		375'	Cancelled due weather.	Successful.	Fogging of D/S.
4-11-58		BT-58-53	351	B #9	7	6386'	475'	100 % successful. Weather undercast. Quality indeterminate.	Successful.	Clear.
4-15-58		BT-58-54	355		12		475'		Successful.	Fogging after going through clouds at 26,000. Disappears after 2 or 3 hours.
4-16-58		BT-58-55	351		7		450'		Successful.	Clear.
4-17-58		BT-58-56	355		12		400'		Successful.	Fogging after going through clouds. Clears after.
4-18-58		BT-58-57	351	B #9	17	3,750'	320'	HS-732 #61 failed to auto-wind. 47 %	Successful.	Clear.
4-23-58		BA-58-02	355		19		400'		Successful.	Fogged.
4-23-58		BT-58-58	351		18		400'		Successful.	Clear.
4-24-58		BW-58-08	355		18		275'		Successful.	Fogged.
4-25-58		BT-58-59	351		13		300'		Successful.	Clear.

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Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Configuration Operation	Tracker Operation	Drift Sight Operation
4-29-58		BT-58-60	355	B #6	7	3495'	507'	100 % successful. Weather scattered - broken. 10 % to take quality good.	Successful.	Fogging.
4-30-58		BT-58-61	352	B #9	12	336 cyc	475'	HS-732 Jam (#12). Blade #1. Undetermined. 11 %	Successful.	Clear.
5-1-58		BT-58-62	355	B #6	7	3660'	485'	Successful 100 %.	Successful.	Slight fogging.
5-2-58		BT-58-63	352	B #2	12	940 cyc	? No report	HS-732 (#56) Malfunction mislatching. 25 %	? No report.	?
5-4-58		BT-58-65	352	B #6	12	7126'	400'	100 % successful.	Successful.	Clear.
5-6-58		BT-58-66	352	A-2 #5	19	2979' 3 cameras	400'	100 % successful.	Successful.	Clear.
5-7-58		B -4079	352		7		735'		Successful.	Clear.
5-8-58		BT-58-67	355		18		340'		Successful.	Clear. (1st flight no fog this A/C).
5-9-58		BT-58-68	355	B #9	18	5,826'	400'	100 % successful. Mode 1.	Successful.	Clear.
5-13-58		BT-58-69	352	B #9	12	4,830'	418'	100 % successful. Mode 2.	Successful.	Clear.
5-15-58		BT-58-70	352	B #6	12	7,038'	500'	100 % successful. Mode 1.	Successful.	Clear.
5-16-58		B-1406	352	B #9	12	8,110'	658'	100 % successful. Mode 1.	Successful.	Clear.
5-17-58		B-1407	355	B #2	7	6,000'	931'	100 % successful. Mode 2.	Successful.	Clear.
5-18-58		B-1409	352	B #6	12	3,572' (8,000' sked)	515'	Model. Film wrapping on metering roller due failure tension sensing switch. 50 %	Successful.	Clear.
5-20-58		BF-58-71	355	B #9	7	?	525'	100 % successful.	Successful.	Clear.
5-21-58		BT-58-72	351		17		475'		Successful.	Clear.
5-22-58		BW-09	352		19		309'		Successful.	Clear.
5-23-58		BT-58-73	355	A-2 #3	19	745' per camera (sked 400')	386'	Mode 1 100 % successful.	Failed to latch after 386'.	Clear.



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Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Configuration Operation	Tracker Operation	Drift Sight Operation
5-27-58		BT-58-74	351	B #9	17	1200 cyc.	509'	Manfunction - Spool Gear came loose failing to take up, causing film wrap. (Tension Servo). <i>62%</i>	Successful.	Clear.
5-28-58		B-1411	352	B #6	18	12,000'	1000'	100 % successful. (Tension Servo)	Successful.	Clear.
5-29-58		BT-58-75	351		19		489'		Successful.	Clear.
5-30-58			352	A-2 #4	19	3315' Total 737 cyc. ea camera	520'	100 % successful.	Successful.	Clear.
6-3-58		B-102	351		18		480'		Successful.	Clear.
6-4-58		BT-58-77	352	A-2 #3	19	5148' Total	694'	100 % successful.	Successful.	Clear.
6-5-58		BT-58-78	351		19		583'		Successful.	Slight frost - upper rim.
6-6-58		BT-58-79	352	A-2 #5	19	1440' Total	125'	100 % successful.	Manfunction - Prism cycle switch maladjusted.	Clear.
6-11-58		B-103	351		17		800'		100 % successful.	Clear.
6-12-58		B-1414	351	B #6	12	2880'	610'	100 % successful. Mismetered. (Tension Servo).	100 % successful.	Clear - Oil spots in .4 power position.
6-17-58		B-1416	352	A-2 #4	7	1500' ea camera	670'	100 % successful.	Successful.	Clear.
6-19-58		B-104	351		17		1000'		Successful.	Motor burnedout after 4 1/2 h
6-21-58		B-1417	355	A-2 #4	?	R1245' V1569' L1569'	?	HS-731 Shtr. Link in Actuating Mechanism broke. <i>94%</i>	?	Light fogging, clear after 15 min.
6-22-58		B-103	352		13		?		Failed to operate during portion of flight. No reason found.	Clear.
6-23-58		B-1418	355	A-2 #5	?	R936' V1650' L1650'	?	HS-731 Shtr. Link failure. Same as Mission B-1417 <i>83%</i>	?	Clear.
6-24-58		B-105	352		13		50'		Unsuccessful. Metering cycle switch.	Clear.

Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Configuration Operation	Tracker Operation	Drift Sight Operation
6-25-58	2695	B-1419	355	A-2 #4	None	R 1629' V 1629' L 1629'		100 % successful. Mode 1.		No report.
6-27-58		B-1420	355	A-2 #3	None	1500' ea		100 % satisfactory. Condensation V-7 window. Data exposures poor.		Clear.
6-29-58		BM-58-13	355	B #6	None	2816' Total 943 cyc.		100 % satisfactory. Quality good.		Clear.
6-29-58		B-1421	351	A-2 #4	None	1459' ea camera		100 % satisfactory		Slight fog top front of bub' - 3 times.
7-2-58		BT-58-81	351	A-1 #5	None	R-2/V-3 L-4 ea 224 cyc Rocker 938 cyc		Tri Cameras 100 %. Rocker - film wrap on metering roller - sheaved pin.		Clear.
7-8-58		B-1424	352	A-2 #3	12	R-6/V-7 L-8 ea 1600'	725'	100 % successful.	Successful.	Clear.
7-10-58		BT-58-83	355	B #9	7	960' ea cassette	629'	Failure after 960'. Folds and tears in material. 17 %	Successful but double pulse.	Clear.
7-10-58		BT-58-84	351		13		566'		Double pulsed. Quality good.	Clear.
7-11-58		BT-58-85	355	B #2	7	4934' 1645 cyc	490'	100 % successful. Modes 1, 2, 3, 4.	Successful.	No report.
7-15-58		B-1426	355	B #6	18	6720' 2232 cyc	0'	100 % successful. Mode 2. Quality fair - weather.	Malfunction. Cause undetermined	No report.
7-16-58		B-1427	355	A-2 #5	19	R-6/1043 V-7/368 L-8/1043 cycles	731'	V-7 HS-731 failure blade link to shtr. trip cam pin frozen. R-6 & L-8 okay. 77 %	Successful.	No report.
7-17-58		B-1428	355	B #6	19	3875/3875 feet. 2590 cyc	935'	100 % successful. Baffling installed. Mode 2.	Successful.	No report.

Mission Number	A/C	& S/N	S/N	Config. Footage	Tracker Footage	Configuration Operation	Tracker Operation	Drift Sight Operation
7-18-58	B-1429	351 B #9	18	3425/3425 feet. 2283 cyc	0'	100 % successful. Mode 2. (Mirror frosted on post flight).	Malfunction. Cause undetermined.	Slight fogging. Cleared 2 h after take off.
7-20-58	B-1432	351 B #6	19	3285/3285 feet. 2190 cyc	140'	100 % successful. Mode 2. Best results to date at "B" - Baffles installed.	Malfunction after 140'. Mismetered and lost loop.	Clear.
7-22-58	B-1433	351 B #9	12	3648/3648 feet. 2432 cyc	?	100 % successful. Light exposure. No evidence vibration.	Malfunction. Mismetered. Loosing loop.	Clear.
7-22-58	B-1434	355 A-2 #5	17	1359' ea camera 906 cyc	600'	100 % successful. Light exp.	Successful. (Vibration).	Clear.
7-23-58	2534 B-1435	352 A-2 #5	7	1800'. 3 cameras 1137 cyc	921'	100 % successful. Quality V. G. Fair in hazy areas.	100 % successful.	Reported oily due to discoloration viewing lens.
7-23-58	2534 B-1436	351 B #6	19	9L okay 9R failure Last 500'	900'	9L 100 %. 9R failure last 300' due no supply brake kit installed. 92 %	100 % successful.	Clear. O. R.
7-24-58	B-1437	351 A-2 #3	18	1700' ea camera 1109 cyc	713'	100 % successful. (Very good quality).	Successful.	Clear. (Power changer inoperative - loose set screw on drive gear.
7-25-58	2695 B-1438	355 A-2 #5	18	R 1425' V 360' L 1425'	0'	R & L 100 %. V-7 HS-731 failed (Link) H/S 54-4646. 73 %	Malfunction. Scan motor burned out.	No report.
7-25-58	2695 B-1439	351 A-2 #3	17	R 702' V 1600' L 1600'	705'	V & L 100 %. R-6 HS-731 failed (Trip Spring) H/S 54-0554. 80 %	Successful.	No report.
7-26-58	2695 B-1440	355 A-2 #4	18	R 1023' V 1023' L 1023'	721'	100 % successful.	Successful.	No report.
7-27-58	2695 B-1441	351 A-2 #3	17	R 1200' V 1200' L 1200'	544'	100 % successful.	Successful.	No report.

Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Configuration Operation	Tracker Operation	Drift Sight Operation
7-28-58	2695	B-1442	355	A-2 #3	12	R 1033' V 1033' L 934'	720	R & V 100% successful. L-8 HS-731 failure (Link) H/S 54-2124. <i>97%</i>	100% successful.	No report.
7-29-58	2739	B-1443	342	A-2 #4	7	R 1380' V 1380' L 1380'	300'	100% successful.	Failure after 300'. Broken wire in T/U Motor.	Oily appearance due to deterioration.
7-30-58	2739	B-1444	352	B #6	13	2040/2040	50'	100% successful. Mode 2.	Failure after 50'. Blown fuse - possible A/C overload.	Cloudy driftsite.
7-30-58	2739	B-1445	351	A-2 #5	17	R 1460' V 1415' L 14601	738'	R & L 100% successful. V-7 case drive taper pin in pinion gear loose. Jamming latching arm - Pop out. <i>98%</i>	Successful.	Fogging.
7-31-58	2739	B-1446	352	A-2 #3	7	No operation due to abort.	40'	No operation.	Successful.	Clear.
8-3-58	2800	B-1447	367	B #6	17	3114/3114'	760'	100% successful. Mode 2. Weather hazy.	Successful.	Fogging / Scratches. H/C not smooth.
8-3-58	2800	B-1448	351	A-2 #3	7	R 1572' V 1572' L 1572'	900'	100% successful. Weather clear.	Successful.	Clear.
8-6-58	2856	B-1450	351	A-2 #5	13	R 1725' V 7.5' L 832'	900'	R-6 100% successful. V-7 0% - Case Drive failure. S/N 98 gear bind. L-8 48% mistracked S/N 23. <i>49%</i>	Successful.	Clear.
8-7-58	2895	B-1451	355	A-2 #3	19	R 1800' V 1800' L 1527'	964'	R-6 & V-7 100% successful. L-8 Mat. stuck metering roller causing film wrap. <i>95%</i>	Successful.	No report. D. S. H/C stiff.
8-9-58	2946	BT-58-87	351	B #9	12	2442/2442 3315/3315	405'	HS-782 K-3 Delay. Failure intermittent. S/N 16 - failed Autowind. Mode 1. <i>73%</i>	Successful.	Clear.
8-11-58	2950	B-1453	351		17		391'		Successful.	Clear.

Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Configuration Operation	Tracker Operation	Drift Sight Operation
8-12-58	3080	B-1454	352	A-2 #4	7	R-6 1237' 80 % V-7 1539' 100 % L-8 1539' 100 %	1000'	V-7 & L-8 100 %. R-6 Magazine #59. Failed and Geneva gear jammed. Life cycles 4000'. <i>93 %</i>	100 % successful.	Clear.
8-12-58	3080	B-1455	367	B #6	17	3731/3831' 2554 cyc	834'	100 % successful.	Successful.	Foggy appearance.
8-15-58	3080	BW-58-11	352		13		444'		Successful.	Clear.
8-15-58	3080	B-1457	355	A-2 #5	12	R-6 1100' V-7 740' L-8 1100'	1000'	R-6 & L-8 100 % successful. V-7 HS-731 SN 54-2075. Rewind spring failed. Life cycles 780'. <i>89 %</i>	Successful.	Frosting on right portion of bubble. Evidence of window frost on V-7.
8-19-58	3121	B-1460	355	A-2 #4	17	R-6 1400' V-7 1400' (74%) L-8 1400'	655'	R-6 & L-8 100 % successful. V-7 HS-731 SN 54-2708. Shtr. trip spring failed. <i>91 %</i>	Successful.	Clear
8-19-58	3121	B-1461	352	B #9	18	762'/762' 19 %	322'	HS-732 SN 16. Failed after 3.3 hrs. #1 blade jammed. <i>19 %</i>	Successful.	Clear.
8-20-58	3176	B-1462	367	B #9	12	4681/4681'	1000'	100 % successful.	Successful.	Vibration in Drift Sight.
8-21-58	3176	B-1464	352	B #6	13	3983/3983'	1000'	100 % successful.	Successful.	Slight frosting at 36.5 alt.
8-26-58	3269	B-1466	355	B #6	12	4698/4698' 3132 cyc	900'	100 % successful. Mode 1 & 2 excellent to good.	Successful.	Clear.
8-27-58	3269	B-1467	367	B #9	17	3413/3413' 2275 cyc	200'	100 % successful. Mode 2	Failure after 200' - Metering solenoid.	Heavy oil on windows. Drift: clear.
8-29-58	3328	B-4087	352	A-1 #5	12	177' Tri. ea camera 1800' Roc.	750'	100 % successful. Modes 1 & 2. No clip	100 % successful.	Clear.
8-29-58	3328	B-1468	355	B #6	18	3676/3676' 2484 cyc	780'	100 % successful. Mode 2. Excellent to good.	100 % successful.	Clear.
8-29-58	3328	BM-58-20	367	B #9	17	1545/1545 1030 cyc	200'	90% HS-732. Latch failure' (#51) (Test Mission on Shtr.)	100 % successful.	No report.

Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Configuration Operation	Tracker Operation	Drift Sight Operation
9-3-58	3490	B-1469	367	B #9	17	6806' 2269 cyc	877'	100 % successful. Mode 2 - Quality fair. (Pinhole) (Fuzzy).	100 % successful.	Clear.
9-4-58	3490	BW-58-12	352		12		470'		100 % successful.	Clear.
9-5-58	3490	BT-58-88	351	B #9	?	2500'	425'	100 % successful.	100 % successful.	No report.
9-7-58	3490	B-1471	352	B #6	13	7622' 2541 cyc	1000'	100 % successful. 1 & 2 Modes.	100 % successful.	Intermittent frosting.
9-12-58	3605	B-1473	367	A-2 #3	18	R-6 1610' V-7 1610' L-8 1405'	900'	R-6 & V-7 100%. L-8 87%. Case Drive failure. 95% 95%	100 % successful.	Frosting first 30 min. clear.
10-3-58	3907	B-1478	367	B #2	7	5755'total 3837 cyc	935'	100 % successful. Mode 1. Quality fair.	100 % successful.	Clear.
10-7-58	3952	B-1480	367	B #2	18	3697' 2465 cyc	1000'	100 % successful. Modes 1 & 2. Resolution fair.	100 % successful.	Clear.
10-23-58	4220	BT-58-89	352	B #2	None	4670'total 3114 cyc		100 % successful. Modes 1 & 2.		Clear.
10-24-58	4221	B-1486	352	B #2	18	7272' 2848 cyc	950'	100 % successful. Mode 2.	100 % successful.	Fogged top and bottom f 2 hrs. Then cleared .
10-31-58	4324	BT-58-90	349	B #2	12	2.%	450'	2 % of scheduled, take - Diode on counter, shorted causing Ckt Bkt to open breaking pwr to shtr.	100 % successful.	Clear
11-6-58	4405	BT-58-91	352	B #2	?	50 %	?	50 % Film wrap on metering roller, rh side. Occurred during change from Mode 2 to 1. Long tension sensing arm.	--	No report.
11-19-58	4628	B-1493	355	B #6	17	364' 43 %	492	43 % Mode 2 - Film wrap metering roller, rh side. Supply spool SN 752480-0-6-6000, 76-8-9-68. Bearings out of alignment.	100 % successful.	Clear.
11-19-58	4628	B-1494	367	B #9	12	7128'	713'	Bearings out of alignment. 100 % successful - Mode 2.	100 % successful.	Clear.
11-20-58	4628	B-1495	355	B #9	17	4596' 3064 cyc.	966'	100 % successful.	100 % successful.	Clear.

Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Configuration Operation	Tracker Operation	Drift Sight Operatio
11-25-58	4822	BT-58-93	349	B #6	13	2376' 2376 cyc.	456'	100 % satisfactory.	100 % satisfactory.	Clear.
12-1-58	4822	BT-58-98	355	B #6	17	2347' each side	400'	100 % satisfactory.	100 % satisfactory.	Clear.
12-3-58	4822	BT-58-100	351	-	18	-	450'	-	100 % satisfactory.	Clear.
12-3-58	4822	BT-58-101	352	-	7	-	250'	-	50 %. Maladjusted 32 sec switch on intervalometer.	Slight fogging after 2 hrs from take off.
12-16-58	5081	BT-58-111	355	A-2 #4	18	67.5' each	370'	100 % satisfactory. Mode 1 yellow f/11.	86 %. Malfunction of scan switch. Had 35 hrs. operation.	Clear.
12-23-58	5195	B-1498	352	B #6	13	6954' 2385 cyc.	750'	100% satisfactory. Mode 2	100% satisfactory	Poor presentation due to on inner optics.

Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage		ation Operation	Tracker Operation	Drift Sight Operation
3-2-58		C-6011	?	A-2 #9	3	3990' total 3 cameras	0'	Suc und ligh	% Quality due haze and low	Failed immediately after takeoff. No cause reported.	No report.
3-30-58		C-1714	?	A-2 #9	10	4425' total 3 cameras	1000'	Suc exc	% Quality	Successful 100 %. Slight bubble fogging.	Clear.
4-2-58		C-1718	?	A-2 #9	10	4800' total 3 cameras	1000'	Suc exc	% Quality	Successful 100 %.	Fogging at high angles and clear vert.
4-5-58		C-1720	?	A-2 #9	10	4758' total 3 cameras	850'	Suc exc	% Quality	Successful 100 %. Dome frosting evidenced.	Fogging during climbout - clear after. (New purging techniques applied on preflight).
4-5-58		C-1721	?	A-2 #9	10	4860' total 3 cameras	1000'	Suc exc	% Quality	Successful 100 %. Quality reduced due frosting on Dome.	Completely fogged for first 3 hrs. - Partially cleared remainder of flight.
4-5-58		C-1722	342	B #10	10		1000'	Fil ide due conden- sat. Transported 100% undetermined due weat %	Successful 100 %.	No report.	
4-8-58		C-1724	342	A-2 #9	16	4680' total 3 cameras	1000'	Suc 1/n	% Quality 30-35	Successful 100 %.	Partial fogging.
4-9-58		C-1725	342	A-2 #9	10	4000' total 3 cameras	?	Suc 1/n	% Quality 30-35	Stopped for 3 hrs. in middle of mission, then started again - Reason unknown.	Partial fogging.
4-12-58		C-1727	358	A-2 #9	16	4950' total 3 cameras	850'	Suc 1/n	% Quality 30-35	Successful 100 %.	Clear.
4-16-58		C-1729	342	A-2 #9	16	3750' total 3 cameras	600'	Suc 1/n	% (Not viewed	Failed after 6 hours. (Metering Micro Switch).	Fogged at high angles.
4-17-58		C-1730	342	A-2 #9	16	3600' total 3 cameras	1000'	Suc ye	% (Not viewed	Successful 100 %.	Slightly fogged at high angles.
4-19-58		C-1731	358	B #10	16	6000'	600'	Suc ye	% (Not viewed	Failed after 600' due metering switch.	Clear.



Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Con Operation	Tracker Operation	Drift Sight Operation
4-21-58		C-1734	358	B #10	9	600'	900'	Film after 600. No appar. Results thin - low <i>15 off</i>	Successful.	Clear.
4-22-58		C-1735	358	A-2 #9	9	2865' 3 cameras	900'	100 %ul. Not viewed.	Successful.	Clear.
4-23-58		C-1737	358	A-2 #9	9	4520' 3 cameras	950'	V-7 arm broke 15 <i>96%</i> cycled of mission. R-6 1%.	Successful.	Clear.
4-24-58		C-1739	358	B #10	9	5400'	900'	100 %ul. Mode 2 - not view	Successful.	Clear.
4-28-58		C-1742	353	B #10	9	8000'	1000'	100 %ul. Mode 1.	Successful.	Clear.
5-5-58		C-1745	353	B #10	9	10,000'	?	100 %ul.	Stopped after 5 hrs.	Fogged except from vertical to 15° forward.
5-7-58		C-1746	342	B #10	16	5000'	1000'	100 %ul. Modes 1 & 2.	Successful.	Minor fogging upper 5% of field of view.
5-10-58		C-1749	342	B #10	16	2610'	0'	85 % tent HS-77	Failure during climbout.	Clear.
5-12-58		C-1751	342	B #10	16	5460'	970'	70 % tent HS-77	Successful.	Fogged 5 % at high angle.
5-13-58		C-1752	342	B #10	9	5000'	950'	100 %ul.	Successful.	Clear.
5-14-58		C-1753	343	B #10	9	5000'	975'	100 %ul.	Successful.	Clear.
5-16-58		C-1754	342	B #10	9	5700'	975'	65 % tent. HS-732 (undr)	Successful.	Minor fogging.
5-22-58		C-1760-A	353	B #10	9	6100'	1000'	100 %ul.	Successful.	Minor fogging.
5-23-58		C-1761-A	353	B #8	9	5900'	1000'	97 % tent HS-7 (elected).	Successful.	Minor fogging.
5-24-58		C-1762	353	B #10	16	5800'	980'	Vacu throughout solenoid plung. 40 % loss due HS-7 ching both direc <i>off</i>	Successful.	Frosted except in vertical.

Date	TWX	Mission Number	A/C	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Operation	Tracker Operation	Drift Sight Operation
5-26-58		C-1763	353	B #8	16	3750'	985'	9L strap around. No tear okay. 50%	Successful	Upper 50% fogged.
6-5-58		C-1769	353	A-2 #6	16	3450' total (3)	995'	100% ful.	Successful.	Upper 50% fogged.
6-11-58		CF-58-14	342	B #10	9	3300'	600'	100% ful.	Successful.	Fogged for 1st hr., then clear.
6-11-58		C-1773	353		4		900'		Successful.	Fogged during climbout. Unusable throughout flight.
6-19-58		C-6012	342	B #10	16	6900'	950'	100% ful.	Successful.	Clear.
7-2-58		CW-58-5	359		16		450'		Successful.	Slight icing upper 100%.
7-3-58		CW-58-6	359		9		450'		Successful.	Clear.
7-8-58		CT-58-24	359	B #5	9	8000'	500'	100% ful. Quality excellent or better.	Successful.	Black smudge center. Icing 5% - cleared after 45 min.
7-11-58		CT-58-26	359	B #8	16	4420'	450'	100% ful. Quality good. Under	Successful.	Clear.
7-14-58		C-1774	359	A-1 #4	16	450' total R-V-L successful	850'	Tri-00% successful. Rocked due failure on pref	Successful.	Clear.
7-15-58		C-1775	359	A-1 #4	16	325' from HC-730 1740' from HR-731	800'	Tri-00% successful. New speed spring (2020). Quality good.	Successful.	Clear.
7-16-58		C-1776	353	A-1 #4	9	Tri-camera 255' total Rocker 1475' (80%)	800'	Tri-00%. Rocker case coupling shaft. Under 80% of flight. Magid stuck.	Successful.	Clear.
8-11-58	5112	CM-58-16	342	B #5	10	5000'	450'	100% ful. Superior quality to date at C.	Successful.	Minor fogging first hour.
8-12-58	5207	CM-58-17	353	B #8	10	5000'	400'	100% ful. Focus problem.	Successful.	Minor fogging first hour.

## MISSION SUMMARY ATTACHMENT

Date	TWX	Mission Number	A/G	Config. & S/N	Track S/N	Config. Footage	Tracker Footage	Operation	Tracker Operation	Drift Sight Operation
8-20-58	5296	C-6017	342	B #10	9	11,060'	1000'	100 % successful. 10:50 LPM.	Successful.	Minor fogging first hour.
8-20-58	5296	C-6017-A	353	B #8	10	5,000'	100'	100 % successful. 40 LPM.	Failure after 100' ?	Minor fogging first hour.
9-4-58	5398	C-1778	342	A-1 #4	9	57' ea 1347'	?	100 % successful. Mode 1.	25 % accomplished, cause unknown.	Clear.
9-10-58	5540	C-6019	359	B #8	16	3810' 3810'	0'	100 % successful. Mode 1.	0 % blown fuse on climbout.	Clear.
9-25-58	5688	C-1779	359	A-1 #4	16	61' ea 1350'	100 % footage ?	100 % successful. Over eye of typhoon turbulence.	100 % successful.	Forward 50 % iced during climbout.
9-30-58	5720	CT-58-33	353	B #5	10	2775' ea side	325'	100 % successful. Mode 1.	100 % successful.	Clear.
10-14-58	5873	CT-58-34	353	B #5	19	3750' ea side	400'	100 % successful. Mode 1.	100 % successful.	Clear.
10-22-58	6003	C-6023	342	B #5	16	3750' ea side	650'	100 % successful. Mode 1.	100 % successful. (Note: Abrasion mark on back side of film entire length - due manufacture.)	Clear.
11-18-58	6243	CT-58-39	353	B #8	-	3420' ea side	-	100 % successful. Mode 1.	-	Clear.
11-25-58	6307	CT-58-41	353	A-2	16	R-6 0 V-7 1105' I-8 1105'	590'	V-7 1105' successful. 66 % R-6 1105' link at 1105'.	100 % successful.	Clear - R/C stiff.
12-2-58	6343	CT-58-42	353	A-2	9	R V 1460' ea L	550'	100 % successful. Mode 1.	100 % successful.	Clear.
12-2-58	6366	CT-58-43	353	B #5	-	1485' ea side	-	100 % successful. Mode 1.	-	No report.
12-3-58	6366	CT-58-44	342	B #8	-	4710' ea side	-	100 % successful. Mode 1.	-	No report.